

7. Lots abutting a watercourse, drainage way, channel, stream, or flood plain shall have additional minimum width or depth as required to provide an adequate building site, accommodate the full width of necessary easements, and conform to the minimum yard requirements specified in Section 5.2 of this Ordinance.
8. Vehicular access from lots to minor or major arterial streets may be prohibited. Vehicular access from lots to collector streets may be prohibited if the Design Hour Volume is determined by the Zoning Administrator or designated agent or Town's Engineer to be excessive.

E. Easements

1. Easements to permit access for maintenance and repair of surface and subsurface drainage improvements and utility installations, shall be provided on the final copies of the Primary Plat, Secondary Plat, and Construction Plans. Location of easements shall be reviewed by the Town's Engineer and representatives of local utility companies.
2. Easements shall be a minimum of fifteen (15) feet in width, shall provide continuity from block to block, and shall be located along rear, side, or front lot lines, one-half (2) the width of the easement shall be taken from each lot. In the case of lots extending to the boundary of the lands platted and not adjoining another plat, the full width of the easement shall be provided on such peripheral lots.
3. Where a subdivision is traversed by a watercourse, drainage way, channel, or stream, the subdivider shall designate drainage easements on both sides of the watercourse, the width to be determined by the Plan Commission; and in the case of a legal drain, the County Drainage Board.
4. When a proposed drainage system shall carry water across private lands outside the subdivision, appropriate drainage rights must be secured by the subdivider and indicated on the plat. Appropriate legal documentation must be submitted.

F. Open Space

1. If a proposed development will include at least 40 dwelling units (in one phase or a combination of phases), the subdivider shall be required to plat a minimum of one (1) acre of open space for each forty (40) dwelling units to be constructed when the gross density of such development is 2.5 dwelling units per acre or greater. A dwelling unit shall be defined as a single-family home, condominium, or apartment/rental unit.
2. The subdivider shall permanently dedicate the open space acreage for public use. The land may be deeded by the subdivider to the Town of Ashley, the School Corporation, local service clubs, or to a duly organized homeowner's association within the subdivision. The Plan Commission shall have final approval as to the use of dedicated open space. If not deeded to the Town, the Town of Ashley shall have no maintenance responsibilities for such open space.
3. Easements, crosswalks, and road frontage to provide public access to the open space shall be shown on the Secondary Plat.
4. Existing natural features that add value to residential development and enhance the attractiveness of the community shall be preserved in the design of the subdivision and may be incorporated into dedicated open space.

G. Subdivision and Street Names

1. The proposed name of the subdivision shall not duplicate, or too closely approximate phonetically, the name of any other subdivision in the area covered by these regulations. The Plan Commission shall have final authority to approve the name of the subdivision which shall be determined at the time of the preliminary plat approval.
2. Street names shall not duplicate any existing name within the area covered by these regulations except where a new street is a continuation of an existing street. Street names that may be spelled different but sound the same as existing streets shall not be used.
3. The Plan Commission shall have final authority to name all streets (in case of conflicts) at the time of preliminary plat approval.

H. Mobile Home or Manufactured Housing Parks

In addition to complying with the standards and procedures of Sections 5 and 8 herein, all mobile home or manufactured home parks shall be constructed in accordance with the following minimum requirements:

1. Mobile home or manufactured home parks shall meet the requirements as set forth in the Indiana Mobile Home Parks Act of 1955, as amended, and all applicable Indiana State Board of Health Regulations.
2. Each mobile home or manufactured home lot shall be provided with municipal water and sewage, and be connected to electricity.
3. The minimum area of a mobile home or manufactured home park shall be fifteen (15) acres with frontage along or having access via a private drive to a major thoroughfare.
4. The minimum area of a mobile home or manufactured home lot shall be five thousand (5,000) square feet.
5. The minimum mobile home or manufactured home lot width shall be fifty (50) feet except around cul-de-sacs where the minimum frontage accepted shall be twenty-five (25) feet provided that thirty (30) feet, on a radial, from the pavement edge the lot width is fifty (50) feet.
6. Except at established entrances and exits serving the mobile home or manufactured home park, a dense green belt of evergreen trees and/or shrubs, not less than six (6) feet high after one full growing season and which, at maturity, is not less than twelve (12) feet high, or other visual buffer as may be approved by the Plan Commission, shall be located and effectively maintained at all times along the boundary of the mobile home or manufactured home park.
7. The mobile home or manufactured home park shall be adequately lighted as determined by the Zoning Administrator or designated agent.
8. The minimum distance between any two (2) structures shall be ten (10) feet at any one (1) point and average at least twenty (20) feet the entire length or width of each structure. Each structure shall be at least ten (10) feet back from the edge of the pavement of a private roadway within the park and at least twenty (20) feet from the property line of the mobile home or manufactured home park.

9. Each mobile home or manufactured home shall be provided with a foundation designed to support the maximum anticipated loads during all seasons and approved by the Town's designated inspector.
10. No structure shall be closer to a public right-of-way than forty (40) feet.
11. There shall be provided at least two (2) vehicle parking spaces per mobile home or manufactured home lot within the mobile home or manufactured home park with a minimum of twenty-five (25) spaces provided.
12. All roads within a mobile home or manufactured home park must have a concrete or hot or cold bituminous asphalt surface of at least twenty (20) feet in width, with the entrance roads having a width of at least thirty (30) feet. Construction of all streets shall be in accordance with Section 8.6.A.9.
13. An area equaling at least two hundred fifty (250) square feet per mobile home or manufactured home lot shall be provided in one (1) or more locations on the premises for recreation purposes. The minimum of such recreation area(s) shall be twenty thousand (20,000) square feet or the above, whichever is greater.
14. Each mobile home or manufactured home park shall provide waterproof storage structures for each mobile home or manufactured home by providing one (1) on each lot or one (1) central waterproof structure with one (1) space per lot.
15. The mobile home or manufactured home park shall be designed so as not to increase the stormwater run-off to adjoining property that will result from the development. Curb and gutter shall be required in accordance with Section 8.6.C.2.
16. Concrete sidewalks, a width of four (4) feet minimum, shall be constructed and located in such a manner as to provide access from all lots to all common use areas in the park. Also, sidewalks must be provided from all entrances to mobile homes and manufactured homes to adjacent streets and/or sidewalks.
17. All mobile home and manufactured homes shall be properly secured, anchored and approved by the Town's designated inspector.
18. There shall be a sufficient off-street storage area for trailers, boats, etc. located in a common use area in the park.
19. Each mobile home or manufactured home shall be enclosed with foundation siding that is weather resistant, noncombustible, or self-extinguishing materials that blend with the exterior siding of the home.

8.6 STANDARDS FOR IMPROVEMENTS AND INSTALLATIONS

A. Street Improvements

1. Streets shall be completed to grades shown on the Construction Plans drawn by the subdivider's professional engineer or land surveyor and approved by the Plan Commission.
2. Intersections shall be designed with a flat grade wherever practical. In hilly or rolling areas, at the approach to an intersection, a leveling area shall be provided having not greater than a two percent (2%) grade at a distance of sixty (60) feet, measured from the nearest right-of-way line of the intersecting street.

3. At intersections of streets or alleys, property line corners shall be rounded by arcs of at least twenty (20) feet radii or by chords of such arcs. Arterial and all streets in commercial and industrial subdivisions shall have a minimum curb radius of thirty (30) feet. Collector streets shall have a minimum curb radius of twenty-five (25) feet. Local streets shall have a minimum curb return radius of twenty (20) feet.
4. If the smaller angle of intersection of two (2) streets is less than sixty (60) degrees, the radius of the arc at the intersection of property lines shall be increased as deemed advisable by the Commission.
5.
 - a. Horizontal visibility on curved streets and vertical visibility on all streets must be maintained along the centerline as follows:

(1)	Arterial Streets	500 feet
(2)	Collector Streets	300 feet
(3)	Local Streets	150 feet
 - b. Curvature measured along the centerline shall have a minimum radius as follows:

(1)	Arterial Streets	500 feet min.
	(or as determined by design speed standards)	
(2)	Collector Streets	300 feet
(3)	Local Streets	150 feet
 - c. Between reversed curves there shall be a minimum tangent distance as follows:

(1)	Arterial Streets	100 feet
(2)	Collector Streets	40 feet
(3)	Local Streets	40 feet
6. Maximum/minimum grades for streets shall be as follows:
 - a. Arterial Streets - not greater than six percent (6%).
 - b. Collector Streets - not greater than eight percent (8%).
 - c. Local Streets - not greater than eight percent (8%).
 - d. Minimum grade for all streets is four-tenths percent (0.4%).
7. Before any performance bond covering a street installation is released, the Plan Commission, Town Council, or the Town's Engineer may request that core borings of the street be done at the subdivider's expense. Cores shall be sent to an independent testing laboratory for analysis.
8. A developer may request permission of the Plan Commission to delay the installation of the one- (1) inch surface layer of asphalt until the binder layer of asphalt has had a sufficient time period to prove its durability under the stress of heavy construction traffic. The developer shall be required to submit a separate performance bond to cover the cost of the installation of the one- (1) inch surface layer of asphalt.
9. Design Requirements of Street Pavements:

- a. Streets shall be constructed in accordance with the following minimum specifications:

Alternative	Arterial	Collector	Local
BITUMINOUS PAVEMENT & STONE BASE			
#2 Compacted Aggr. Base	6 Inches	6 Inches	6 Inches
#53 or #73 Compacted Aggr. Base	4 Inches	4 Inches	4 Inches
220 lb/S.Y. #9 Asphalt Binder	3 Inches	3 Inches	3 Inches
110 lb/S.Y. #11B Asphalt Surface	1 Inch	1 Inch	1 Inch
FULL-DEPTH ASPHALT PAVEMENT			
Asphalt Base	550 lb/S.Y.	550 lb/S.Y.	440 lb/S.Y.
#9 Asphalt Binder	330 lb/S.Y.	330 lb/S.Y.	220 lb/S.Y.
#11B Asphalt Surface	140 lb/S.Y.	140 lb/S.Y.	140 lb/S.Y.
CONCRETE PAVEMENT			
#73 Compacted Aggr. Base	4 Inches Min.	4 Inches Min.	4 Inches Min.
Unreinforced Concrete Pavement	8 Inches	8 Inches	8 Inches

- b. The earth or stone sub-base beneath the concrete street and the stone sub-base beneath the flexible asphalt street shall be compacted to meet established municipal standards.
- c. Subsurface drainage tile shall be placed under the street base where the subdividers engineer or the Town's Engineer has determined that wet or unstable soil conditions exist.
- d. All materials shall be furnished and installed in accordance with Standard Specifications, Indiana Department of Transportation, latest edition.
10. Dimensional Requirements of Street Pavements

Street Type	Minimum Street Width (Feet)	Minimum Dedicated Right-of-Way Width (Feet)
Arterial	30	80
Collector	30	80
Local	30	60

- b. Street width is measured from back to back of a two- (2) foot wide curb and gutter located on each side of the street unless otherwise approved.

B. Stormwater and Subsurface Drainage

1. The subdivider shall provide the subdivision with an adequate stormwater sewer system whenever curbs and gutters are installed and whenever the evidence available to the Commission indicates that natural surface drainage is inadequate. When the surface drainage is adequate, easements for such surface drainage shall be provided. Curbs and storm drains along both sides of all streets are required in all subdivisions.
2. The stormwater drainage system shall be separate and independent of any sanitary sewer system.
3. Storm drainage facilities shall be located in the street right-of-way, where feasible, or in perpetual, unobstructed easements of appropriate width, and shall be constructed in accordance with the details on the Construction Plans provided by the subdivider's engineer or as approved by the Plan Commission.
4. Storm sewer inlets shall be provided at all low points and so that surface water is not carried across or around any intersection, nor for a distance of more than three hundred (300) feet in the gutter or as may be approved by the Town's Engineer.
5. It is the responsibility of the subdivider to keep all major watercourses, drainage systems, etc., not under the jurisdiction of any public agency, open and free flowing.
6. Drainage facilities shall be capable of accommodating peak runoff from a ten- (10) year return period storm or greater intensity, without endangering the public safety, health, or causing significant damage to property.
7. Design Calculations: Design calculations are required as part of the drainage plan and shall specifically include:
 - a. Estimate of stormwater runoff:
 - (1) Drainage map, including indication of drainage patterns for lots and blocks of areas affecting the proposed development site.
 - (2) Weighted runoff coefficient computations.
 - (3) Time of concentration computation indicating overland flow time and travel times in swales, gutters, pipes, and/or channels.
 - b. Closed conduit and open channel design computations:
 - (1) Size of pipe or channel cross-section.
 - (2) Pipe and channel slopes in percent.
 - (3) Roughness coefficient.
 - (4) Flow velocities in feet per second.
 - (5) Design capacity in cubic feet per second.
 - (6) Pipe and channel invert elevations.

- c. Head loss computations in manholes and junction chambers.
 - d. Hydraulic gradient computations, wherever applicable.
- 8. On-site drainage facilities shall be designed to accommodate:
 - a. The water runoff from the parcel after development;
 - b. The present water runoff from developed areas upstream;
 - c. the present peak water runoff from undeveloped areas upstream;
- 9. Each applicant or other entity which makes any surface change shall be required to:
 - a. Collect on-site surface runoff and springs and dispose of it to the point of discharge into an adequate outlet approved by the Town's Engineer.
 - b. Pay his proportionate share of the total cost of off-site improvements to the common natural watercourse.
 - c. Provide and install at his expense, in accordance with the requirements of the Ordinance, all drainage and erosion control improvements.
- 10. The subdivider shall provide a subsurface drainage system, below curbs, to be placed along both sides of the subdivision streets and wherever else within the subdivision that it is determined to be necessary. The purpose of the subsurface piping system is to provide drainage for the street sub-base. The subsurface drainage system shall discharge to the storm sewer system or to the surface drainage system upon approval from the Town's Engineer. No subsurface drainage system connections will be permitted to the sanitary sewer system.
- 11. It is illegal for sump pumps, downspouts, or foundation drains to outlet directly to the street or into the right-of-way of the street, or to be connected to the sanitary sewer.
- 12. Plans for stormwater drainage shall include details for stormwater detention and retention. Detention facilities shall be designed using the following guidelines to limit the peak discharge from a development.
 - a. For developments with a drainage area (tributary to stormwater detention facilities) equal to or greater than ten (10) acres, peak discharge from the detention facility shall be limited to the five- (5) year pre-developed frequency storm peak discharge, with a duration equal to or slightly greater than the time of concentration for the drainage area, or the twenty-four (24) hour duration storm, whichever provides the lesser peak discharge.
 - b. For developments with drainage area (tributary to detention facilities) less than ten (10) acres, peak discharge from the detention facility shall be limited to the ten (10) year period pre-developed frequency storm peak discharge, with the same duration criteria provided in item a. above.
 - c. The five (5) year/ten (10) year peak discharge shall be based on land use conditions prior to development, using corresponding runoff coefficients, time of concentration, and other basin parameters.

- d. Inflow (runoff) to all stormwater detention facilities shall be determined using a one hundred (100) year twenty-four (24) hour storm to develop an inflow hydrograph.
- e. The one hundred (100) year twenty-four (24) hour peak discharge (and inflow hydrograph) shall be based on land use conditions representing fully developed conditions, using corresponding runoff coefficients, time of concentration, and other basin parameters.
- f. A routing procedure shall be used to demonstrate that the stormwater detention facility will reduce the one hundred (100) year peak discharge, from the developed area, to a peak discharge equal to or less than five (5) year/ten (10) year peak discharge using the pre-developed conditions.
- g. The results of the routing procedure shall demonstrate that adequate storage volume has been provided. The detention facility shall not be overtopped from the one hundred (100) year twenty-four (24) hour storm event, and shall have a minimum freeboard of two (2) feet between the maximum routed pool elevation and the top of the facility embankment.
- h. An emergency spillway shall be provided to discharge flow resulting from pool elevations greater than the one hundred (100) year twenty-four (24) hour pool elevation. The spillway shall have a minimum size adequate to pass the routed one hundred (100) year twenty-four (24) hour storm (assuming that the primary spillway is plugged and non-functional) without overtopping the detention facility embankment. The elevation of the emergency spillway shall not be placed lower than the routed one hundred (100) year twenty-four (24) hour pool elevation.
- i. Erosion protection shall be provided for the primary outlet and emergency spillway so that the detention facility embankment will be adequately protected. Location of the emergency spillway shall be in undisturbed material, unless otherwise approved by the Town's Engineer.
- j. The minimum allowable size for the primary outlet conduit, from the detention facility, shall be twelve (12) inches. If further restriction of the outlet conduit is required, the restriction shall be made at the head end of the outlet conduit.
- k. In those instances where the discharge velocity from the primary outlet or emergency spillway is greater than 6fps or excessive in the opinion of the Town's Engineer, energy dissipation may be required.
- l. Detention facilities, which are designed to have dry bottoms, must be designed to include under-drains, to drain the bottom of the detention facility, so that the facility can be maintained. Also, the bottom of the facility shall be designed to have longitudinal and traverse grade to the outlet, so that the facility will empty, leaving no ponded water.
- m. Methodology for developing peak discharge hydrographs and flood routing calculations shall be in accordance with acceptable engineering practice. Calculations based on the Soil Conservation Service Procedures, the Corps of Engineers' Procedures, or the Bureau of Reclamation Procedures are considered acceptable. All other procedures must be approved by the Town's Engineer.

- n. Peak discharge calculations shall be submitted for the five (5) year/ten (10) year pre-development and one hundred (100) year post-development conditions. The calculations shall show the drainage area, the runoff coefficients, the time of concentrations, and other basin parameters used to develop the appropriate peak discharges.
- o. Calculations shall be submitted which show stage-discharge relationships (rating curves) for the primary outlet and emergency spillway, the stage-storage relationship for the detention facility, the inflow hydrograph for the one hundred (100) year twenty-four (24) hour storm, and the routed one hundred (100) year twenty-four (24) hour discharge hydrograph.

C. Curbs and Gutters

- 1. The Commission shall require curbs and gutters to be installed on each side of new streets.
- 2. The curbs and gutters shall be constructed according to the following specifications:
 - a. The base for the curbs and gutters shall be well compacted on the existing base or grade.
 - b. The minimum grade of any street gutter shall not be less than four-tenths percent (0.4%).
 - c. The curbs and gutters shall be roll type, unless otherwise required or approved by the Town's Engineer.
 - d. Inlets shall be located at the low point in the street grade and at other spacing as stormwater system calculations require. The maximum spacing between any two inlets shall be 500 feet.
 - e. Inlet grates should be depressed slightly below the plane of the gutter to improve removal of runoff water. Inlet grates shall be heavy-duty type and recommended for bicycle traffic.

D. Sewers

- 1. The subdivider shall provide the subdivision with a complete sanitary sewer system which shall connect with an existing interceptor sewer linking the subdivision to the Ashley Wastewater Treatment Plant. If said interceptor is not located adjacent to the subdivision site, it shall be the responsibility of the subdivider to extend the interceptor sewer to his property line. The subdivider may be reimbursed for part of the cost of extending the interceptor sewer.
- 2. Design plans for installation of a sanitary sewer system shall be provided by the subdivider and approved by the Town Council, Board of Works, the Indiana Department of Environmental Management, and other appropriate local and State agencies as required. Upon the completion of the sanitary sewer installation, the construction plans for such systems as-built shall be filed with the Town Council and Board of Works.
- 3. Each lot in the subdivision shall be required to pay a sewer connection fee to the Ashley Clerk-Treasurer, as indicated in the Official Fee Schedule at the time of obtaining a Location Improvement Permit.

4. Selected Design Criteria
- a. Alignment - All sewers shall be laid with a straight alignment between manholes.
 - b. Manhole Location - Manhole type, size, location and design shall be completed in accordance with established Municipal Standards.
 - c. Manholes - The difference in elevation between any incoming sewer and the manhole invert shall not exceed twenty-four (24) inches where required to match crowns. The use of drop manholes will require approval by the Town's Engineer. The minimum inside diameter of the manholes shall conform to those specified by the Town's Engineer or according to State requirements.
 - d. Sewer Locations - Sanitary sewers shall be located within street or alley rights-of-way, unless topography dictates otherwise. When located in easements on private property, access shall be provided for all manholes and oversizing may be required in these instances. Where sewer lines in private easements cross public street or alley rights-of-way, a manhole shall be provided in such rights-of-way where possible. Imposed loading shall be considered at all manhole locations. No less than six (6) feet of cover shall be provided over top of pipe in street and alley rights-of-way or five (5) feet in all other areas.
 - e. Relation of Sewers to Water Mains - A minimum horizontal distance of ten (10) feet shall be maintained between parallel water and sewer lines. A minimum vertical distance of eighteen (18) inches shall be maintained between intersecting water and sewer lines.
 - f. Mandatory Connections to Public Sewers - In accordance with Indiana Code, if a public sanitary sewer is available within 300 feet of a property, the owner thereof may be required to connect to said sewer for the purpose of disposing of waste. It shall be unlawful for any such owner or occupant to construct or rebuild upon such property an individual sewage disposal system.

E. **Water Supply**

1. The subdivider shall provide the subdivision with a complete water supply system, which shall be connected to the existing Ashley water supply.
2. The plans for the installation of water main supply systems shall be provided by the subdivider and approved by the Town Council and the Indiana Department of Environmental Management. Upon completion of the water supply installation, the plans for such system as built shall be filed with the Town Council.
3. Approved fire hydrants shall be provided at each street intersection and at intermediate points between intersections, as recommended by the Water Utility Superintendent and Fire Chief. Generally, hydrant spacing is five hundred (500) feet.

F. Monuments and Markers

1. Monuments and markers shall be placed under the supervision of a licensed land surveyor and according to State Land Surveyor Regulations so that the center of the pipe or marked point shall coincide exactly with the intersection of lines to be marked, and shall be set so that the top of the monument or marker is level with the finished grade.
2. Monuments shall be set:
 - a. At the intersection of lines forming angles in the boundary of the subdivision, at the beginning and end of all curves and points of tangency of the perimeter of the plat.
 - b. At the intersection of right-of-way lines within the plat.
3. Markers shall be set:
 - a. At the intersection of the centerlines of all streets, the center points of all cul-de-sac turn arounds, at the beginning and end of all curves and at angle points.
 - b. At all points where lot lines intersect curves, either front or rear.
 - c. At all angles in property lines of lots.
 - d. At all lot corners not established by monuments.
4. Monuments shall be of precast concrete or cast-in-place concrete with minimum dimensions of four (4) inches by four (4) inches by thirty-six (36) inches set vertically in place. They shall be marked on top with iron or copper dowels at least three eighths (3/8) inch in diameter, or deeply scored on top with a right angle cross.

Markers shall consist of iron pipes, steel bars, or copper bars, contain magnetic qualities, have a distinctive top which will be marked with a deep point or cross at the correct location, and be thirty-six (36) inches in total length and not less than five-eighths (5/8) inch in diameter.
5. A minimum of one (1) permanent benchmark shall be established for each forty (40) acres or fraction thereof, subdivided and at a location designated by the Town's Engineer. The monuments shall be of concrete with a dimension of four (4) inches by four (4) inches and forty-eight (48) inches long. A brass plate inscribed with the elevation of the benchmark shall be fastened to the concrete with a minimum of one-fourth (1/4) inch high letters and numbers. Unless otherwise directed by the Town's Engineer, benchmark datum shall conform to USGS sea level datum of 1929 and/or USC and GS datum.
6. It shall be the responsibility of the subdivider to prevent disturbance or destruction to all existing monuments within the jurisdictional boundaries of the Town of those parties under the direction of or in the employment by the subdivider. Any activities relating to the subdivider's improvements which cause disturbance or destruction of existing monuments shall be reported immediately to the Town as well as to the appropriate county, state, or federal agencies. The subdivider shall be responsible for the cost of any repair or re-establishment of any existing monument disturbed or destroyed by his activities. The subdivider shall be aware of fines and penalties in existence for disturbance or destruction of existing monuments.

7. All Public Land Survey points (section corners, quarter section corners, etc.) within or on the boundaries of the land to be subdivided shall be shown on the plat and referenced by no less than three (3) measurements of angle and distance. Each measurement of angle and distance shall be made from a separate known point on the perimeter of the subdivision.
8. Lot corner markers shall be accurate at the time of sale or transfer from the subdivider to a second party. After sale or transfer is complete, the subdivider, the Town, or other authorized agents shall not be liable for the accuracy of said markers.
9. All documentation necessary for the Town's Engineer to ascertain the location and accuracy of the required monuments of this Section shall be submitted by the subdivider to the Town's Engineer.
10. The plat shall indicate the type and location of all required monuments set within the property being subdivided.
11. Subdivider shall be required to establish the elevation of any benchmark set within the limit of the project to within one-hundredth (1/100) of a foot of the U.S. Geological Survey 1929 sea level datum or USC & GS datum. Evidence of the established elevation shall be certified by a registered land surveyor licensed by the State of Indiana and shall be submitted to the Town's Engineer.
12. Subdivider shall be required to establish the location of all horizontal monuments by means of a traverse of the third order or better. Evidence of successful completion of the required traverse shall be certified by a registered land surveyor licensed by the State of Indiana and shall be submitted to the Town's Engineer.

G. Sidewalks

1. Sidewalks shall be required to be located on both sides of every street within the subdivision plat, including around cul-de-sacs. Sidewalks shall be six (6) inches thick at drives and at least four (4) inches thick in all other locations. If driveways cannot be located, special permission may be obtained by the Commission to deviate from this standard. Sidewalks shall be five (5) feet wide in commercial and industrial subdivisions and four (4) feet wide in residential subdivisions. Sidewalks shall be Portland Cement type in accordance with the Standard Specifications of the Indiana Department of Transportation, latest edition, with expansion joints every forty-eight (48) feet and control joints every six (6) feet.
2. Sidewalks and pathways located away from streets should be properly lighted to permit visual surveillance of the walk or path from the street.
3. When sidewalks or pathways cross major street intersections within or adjacent to the subdivision, safety devices such as painted crosswalks, signs, or traffic signals shall be installed.
4. Easements of at least ten (10) feet in width shall be provided for sidewalks, pedestrian paths, and bicycle paths.
5. ADA-compliant ramps for wheelchairs and bicycles shall be provided on all sidewalks and pathways. Ramps are to be located at all intersections and other transition access points. Overhead obstructions shall be cleared to a height of at least eight (8) feet. Rolled curbs are not a substitute for wheelchair ramps.

H. Street Signs and Street Lighting

1. The subdivider shall be responsible for installing street signs at each intersection throughout the subdivision. All hardware and fixtures shall be approved by the Plan Commission. The Town of Ashley shall be responsible for placement of traffic control signs where deemed necessary in the development by the Town's Engineer.
2. When the subdivision contains private streets, the subdivider shall be required to post a sign at the entrance of the development proclaiming the name of the subdivision with the phrase "Private Streets" placed directly below in letters of two (2) inches minimum height.
3. The subdivider shall provide the subdivision with street lights to be installed at intersections throughout the subdivision or where deemed necessary by the Town's Engineer. Street lights shall be pole mounted and conform to the installation specifications of the Electric Utility. All electric lines are to be buried.

I. Utilities

All utility lines, including electrical power, gas, telephone, CATV, sewer, and water shall be located underground throughout the subdivision. The location of utility lines shall be shown on the Primary Plat and on the Construction Plans. Service connections to the property lines of each lot in the development shall be provided by the utility or subdivider.

8.7 DRAINAGE, EROSION, AND SEDIMENT CONTROL**A. General**

1. No changes shall be made in the contour of the land, nor shall grading, excavating, removal, or destruction of the topsoil, trees, or other vegetative cover of the land be commenced until such time that a plan for minimizing erosion and sedimentation has been reviewed by the Zoning Administrator or designated agent or there has been a determination by the Zoning Administrator or designated agent that such plans are not necessary. (Applies only to subdivision developments.)
2. Measures used to control erosion and reduce sedimentation and to provide drainage shall, as a minimum, meet the standards and specifications of the County Storm Drainage, Erosion, and Sediment Control Ordinance. The Zoning Administrator or designated agent shall ensure compliance with all appropriate specifications.

B. Performance Principles

1. The following measures are effective in minimizing erosion and sedimentation and shall be included where applicable in the overall development plan.
 - a. Existing features which would add value to residential, commercial, natural, or manmade assets such as trees, streams, vistas, historically significant items, and similarly irreplaceable assets shall be preserved through careful and harmonious design.
 - b. Stripping of vegetation, regrading, or other development shall be done in such a way that will minimize erosion.

- c. Development plans shall keep cut fill operations to a minimum and ensure conformity with topography so as to create the least erosion potential and adequately handle the volume and velocity of surface water runoff.
- d. Whenever feasible, natural vegetation shall be retained, protected, and supplemented.
- e. The disturbed area and the duration of exposure shall be kept to a practical minimum.
- f. Temporary vegetation and mulching shall be used to protect exposed critical areas during development.
- g. The permanent final vegetation and structural erosion control and drainage measures shall be installed as soon as practical in the development.
- h. Provisions shall be made to effectively accommodate the increased runoff caused by changed soil and surface conditions during and after development. Where necessary, the rate of surface water runoff will be structurally retarded.
- i. Sediment in the runoff water shall be trapped until the disturbed area is stabilized by the use of debris basins, sediment basins, silt traps, or similar measures.
- j. Design and construction of the drainage facility shall be such that it will be durable and easy to maintain.

C. Grading for Drainage

In order to provide more suitable sites for building and other uses, improve surface drainage, and control erosion, the following requirements shall be met:

- 1. The locations, grading, and placement of subgrade (base) material of all streets, public driveway, and public parking areas shall be accomplished second, after erosion control measures have been taken.
- 2. All lots, tracts, or parcels shall be graded to provide proper drainage away from the buildings, dispose of it without ponding. All land within the development shall be graded to drain and dispose of surface water without ponding, except where approved by the Town's Engineer.
- 3. All drainage provisions shall be of such design to adequately handle the surface runoff and carry it to the nearest suitable outlet such as a curbed street, storm drain, or natural watercourse. Where drainage swales are used to divert surface waters away from buildings, they shall be sodded or planted, as required, and shall be of such slope, shape, and size as to conform to the requirements of the Commission.
- 4. Concentration of surface water runoff shall only be permitted in swales, watercourses, pipes, and detention ponds.
- 5. Land alteration shall be accomplished in such a way that the grades left at the time that the work is completed will be permanent and stable.
- 6. Excavation and Fills

- a. Cut and fill slopes shall not be steeper than three to one (3:1), unless stabilized by a retaining wall or cribbing as approved by the Town's Engineer when handled under special considerations.
- b. Provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surfaces of fills, by installation of temporary or permanent drainage across or above this area.
- c. Cuts and fills shall not endanger adjoining property.
- d. Fills shall be placed and compacted so as to minimize sliding or erosion of the soil.
- e. Fills shall not encroach or impede flows of natural watercourses or constructed channels.
- f. Fills placed adjacent to natural watercourses or constructed channels shall have suitable protection against erosion during this period of construction.
- g. Grading shall not be done in such a way so as to divert water onto the property of another landowner without the expressed consent of the landowner.
- h. During grading operations, necessary measures for dust control shall be exercised.
- i. Grading equipment shall not be allowed to cross live streams. Provisions shall be made for the installation of temporary or permanent culverts or bridges.

D. Responsibility for Drainage and Erosion Control

- 1. Whenever sedimentation is caused by stripping of vegetation, re-grading, or other development activities, it shall be the responsibility of the applicant, person, corporation, or other entity causing such sedimentation to remove it from all adjoining surfaces, drainage systems, and watercourses, and to repair any damage at his expense as quickly as possible.
- 2. Maintenance of all driveways, parking areas, drainage facilities, and watercourses within any development plan area is the responsibility of the applicant or developer, provided that said facilities have not been dedicated to the public and accepted by the appropriate authority for public maintenance.
- 3. It is the responsibility of the applicant and any person, corporation, or other entity doing any action on or across a communal stream, watercourse, or swale, or upon the floodplain or floodway area of any watercourse during the period of development, to return these areas to their original or equal condition upon completion of said activities.
- 4. No applicant, person, corporation, or other entity shall block, impede the flow of, alter, construct any structure, deposit any material or thing, or commit any act which will affect normal or flood flow in any communal stream or watercourse without having obtained prior approval from the County Drainage Board and/or the Indiana Department of Natural Resources, Division of Water, whichever may be applicable.

5. On-site drainage facilities shall be sufficient to accept:
 - a. the water runoff from the parcel after development;
 - b. the present water runoff from undeveloped areas upstream; and
 - c. that part of the water runoff attributable to future development in undeveloped areas upstream, which is not reasonably likely to be accommodated in such upstream areas.
6. Each applicant or other entity which makes any surface changes shall be required to:
 - a. Collect on-site surface runoff and springs and dispose of it to the point of discharge into an adequate outlet approved by the Town's Engineer.
 - b. Handle existing and potential off-site runoff through the development by designing to adequately handle storm runoff from a fully developed area upstream.
 - c. Pay his proportionate share of the total cost of off-site improvements to the common natural watercourse, based on a fully developed drainage area.
 - d. Provide and install at his expense, all necessary drainage and erosion control improvements (temporary and permanent) or as required by the Town's Engineer.
7. It is the responsibility of the applicant or owner to keep all major watercourses, not under the jurisdiction of any public agency, open and free flowing.
8. The applicant or owner will assume the responsibility for maintaining an open and free flowing condition in all minor streams, watercourses, and drainage systems, constructed or otherwise improved in accordance with this Section, which are necessary for proper drainage.

E. Compliance with Regulations and Procedures

1. The design, installation, and maintenance of the required drainage facilities and erosion and sediment control measures shall be in accordance with County standards and specifications, as well as the requirements of the Natural Resources Conservation Service.
2. The approval of plans and specifications for the control of erosion and sedimentation shall be concurrent with the approval of the development and shall become a part thereof.
3. Permission for clearing and grading prior to the approval of the development plan may be obtained under temporary easements or other conditions satisfactory to the Town's Engineer.
4. In the event the applicant or developer proceeds to clear and grade prior to the approval of the subdivision or development plan, without satisfying conditions specified herein, the Plan Commission may revoke the approval of all plans and a suit for an injunction may be instituted to halt further construction until development plans are approved.

5. Topsoil shall not be removed from residential lots or used as spoil. No construction debris or waste material shall be buried or left deposited on any lot or street.

8.8 COMMERCIAL AND INDUSTRIAL SUBDIVISIONS

A. General Requirements

1. Land proposed for platting as a commercial or industrial subdivision shall be subject to all of the requirements of this Ordinance and shall conform to the zoning requirements of the district in which it is located. A Primary Plat, Secondary Plat, and Construction Plans shall be submitted to the Plan Commission for review.
2. Lots and block standards for commercial and industrial subdivisions should be flexible so that lot sizes may be expanded by the subdivider to meet the requirements of a prospective buyer or tenant. If, after recording of a Secondary Plat, the subdivider wishes to amend the lot dimensions, an amended Secondary Plat shall be presented by the subdivider to the Plan Commission for review. Substantial changes shall have to go through another public hearing process. The determination of "substantial changes" and the necessity of a public hearing shall be made by the Zoning Administrator or designated agent.
3. Streets in a commercial or industrial subdivision shall be constructed to the specifications for secondary streets per this Section. The streets shall have a width of thirty (30) feet and a right-of-way of eighty (80) feet minimum. Curb and gutter, storm drainage, and subsurface drainage may be required by the Plan Commission. Once constructed to the specifications of the Town, the subdivider may dedicate the streets to the Town or may, upon approval of the Plan Commission, elect to keep the streets private to be maintained by the owners and/or tenants of the subdivision.
4. Every effort shall be made to protect adjacent residential areas from potential nuisance from a proposed non-residential subdivision, including the provision of extra depth in parcels backing up on existing or potential residential development and provisions for a permanently landscaped buffer strip, when necessary.
5. Truck routes shall be established so as to prevent industrial traffic from encroaching into adjacent residential areas.
6. The builder shall provide each building or lot in the subdivision with a paved parking area which meets the requirements of this Ordinance. The parking area shall have a proper drainage system and should be adequately landscaped and lighted.
7. Loading areas or loading docks shall be designed so that they do not interfere with the operation of other lots or buildings and do not encroach on setback lines.
8. No materials, supplies, motor vehicles, or equipment shall be stored outside of the buildings, unless the storage area is properly screened.
9. Frontage roads shall be provided where requested by the Commission to prevent numerous entrances on existing streets or highways.
10. With respect to traffic and storm drainage, commercial and industrial subdivisions shall be considered in totality; individual parcels or shall not be considered separately.
11. Sidewalks shall be five (5) feet wide.